

Applicant : Bruce Radl
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Attorney's Docket No.: 13076-002001 / AAMOSP01

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

(B)

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1. (Original) Electro-optical apparatus comprising,
lens apparatus,
a CCD image sensor having a predetermined filter pattern of color-sensitive pixels,
and a spectrally dispersive element between said lens apparatus and said CCD.
2. (Original) Electro-optical apparatus in accordance with claim 1 wherein said
filter pattern is a Bayer filter pattern.
3. (Original) Electro-optical apparatus in accordance with claim 1 wherein said
filter pattern is a tri-stripe filter pattern.
4. (Original) Electro-optical apparatus in accordance with claim 2 wherein color-
sensitive pixels are arranged in contiguous groups with each group having at least a red pixel and
a blue pixel and said spectrally dispersive element and said lens apparatus are constructed and
arranged to focus a line image of an optical point upon a line of a group with the red end of the
line within the red pixel of a group and the blue end of the line within the blue pixel of the group.
5. (Original) Electro-optical apparatus in accordance with claim 4 wherein each
group comprises a square having a red pixel adjacent to first and second green pixels adjacent to
a blue pixel.
6. (Original) Electro-optical apparatus in accordance with claim 1 wherein said lens
apparatus and said spectrally dispersive element are constructed and arranged so that red and
blue images are optically shifted to coincide geometrically at a point on said CCD image sensor.
7. (Original rewritten in independent form) Electro-optical apparatus in accordance
with claim 6 Electro-optical apparatus comprising,

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lens apparatus,

a CCD image sensor having a predetermined filter pattern of color-sensitive pixels,
and a spectrally dispersive element between said lens apparatus and said CCD wherein
said color-sensitive pixels are arranged in groups with each group having a red pixel, a blue pixel
and first and second green pixels that meet in a corner and said lens apparatus and said spectrally
dispersive element are constructed and arranged to effectively create a new green pixel by
averaging the first and second green pixels to establish red, green and blue color information
centered on said point located substantially where said red, blue and first and second green
pixels meet.

8. (Original) A method of optical processing including, focusing the image of an
object upon a photoelectric array with a spectrally dispersive element between the lens and array.

9. (Original) A method of optical processing in accordance with claim 8 and further
including optically shifting red and blue digital images of the object to coincide geometrically on
the array.

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